

SAFETY REVIEW PLAN



Prepared for: Collins Residence
Location 1312 West 60th Street North Muskogee OK 74403

INTRODUCTION

This is a review of a Scope of repairs for the Collins Residence. 1 Life Safety was granted permission to look at an Xactimate ESX form, photos, Valor Engineering report, Porter Volunteer fire department report, and State Farms Estimate to make the following safety recommendations for the work being performed. 1 Life Safety has not walked the site and is going by pictures provided.

Collins Residence is sincerely interested in the safety and welfare of every one of its vendor/contractors completing work on their premises. As a vendor/contractor, you will be required to follow instructions and safe practices set forth by Collins Residence. Your supervisor enforces the safety rules of Collins Residence. These rules comply with Collins Residence, agency, state, and federal regulations. If you have any questions about those rules or instructions that have been submitted to you, do not hesitate to ask your supervisor for review of manual.

Collins Residence mandates that all vendors/contractors completing work on the site of/or within Collins Residence buildings have read, agreed, and signed a statement of compliance to the Safety Manual.

The best safety device on the job is you. You must also have regard for the worker next to you. Do not do anything that will jeopardize his or her safety. Your complete cooperation is imperative. Familiarize yourself with all the safe practices.

The practices in this Review are minimal, therefore, additional requirements may be necessary for special circumstances. As your own 'safety person' your experience is valuable. Stay alert and think of what you are doing at all times. Safety for all.

This Review will help you understand and comply with the safety requirements of your work. It is extremely important for you to understand that your work is done in a safe manner. If you are unsure about a certain practice and have questions, stop immediately. Ask your supervisor for clarification before you start work. Your constant effort can prevent accidents and make the job site safer.

Safety is asking if you do not understand. During orientation, your supervisor will advise you on local safety requirements.

- Safety is doing your best to perform your daily tasks in a safe manner you have been shown.
- Safety is doing your best to protect people and equipment from hazards.
- Safety is doing your best to follow all safety rules.

Keep in mind that this safety manual is not all inclusive and can never be fully comprehensive. All employees are responsible for conducting operations in a way that will create a safe working environment for themselves and their co-workers.

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JOB HAZARDS

Due to the COVID-19 issues, all safety protocols set by the CDC will be enforced until the restrictions are released. Handwash Stations need to be put on-site immediately. One for every ten employees should be the set number. All Jobsite meetings need to be via phone or be limited to a 6 ft min standing distance. Breathing masks will always have to be worn. Safety meeting does have to happen daily, but the rules for COVID-19 -19 will be enforced. Due to Covid-19 restrictions there will be a best practice process put in Place. Where working conditions allow make sure that there is a 6 foot of distance between workers. Masks are always to be worn on site. Inside and outside. During breaks the masks can be removed for eating and drinking. The 6-foot distance is to be observed. No sharing of PPE. All tools are to be cleaned at the end of the day. Tools that must be shared will be cleaned before transfer between workers. In hot or heated conditions workers are to work 50 min and break for 10 min because of Mask restrictions. Workers must wash hands before work at lunch and after working close to another worker. Daily temperatures are to be taken before allowed on site of workers. If a worker feels sick or shows signs of Covid-19 they are not allowed on Site. If a worker is exposed to Covid-19 they are to take 2 weeks in quarantine. Ride share is discouraged.

This report will show what is required by OSHA rule to keep all personal, workers, and people that will be in and around the work site Safe. OSHA has rules that they can and will fine for when not followed. These rules are not considered Law and Ordinance but are covered under coverage for work being done. The cost of safety is considered a cost of doing business; however, most contractor estimating programs do not include the cost in their line items. Therefore, Safety must be detailed on a per line-item basis as needed.

Some contractors do include some of these safety items under their cost but must be shown in a separate break down with the added cost. A lump sum cost will not cover all safety items. If the contractor can show cause that the items are being added to the work with their cost, then the cost from this report for that contractor can be eliminated. An example of this is Scaffolding. If all contractors that need scaffold can show that cost is in their bid, then the scaffold cost from this report can be removed.

JOB HAZARD ANALYSIS

1 Life Safety was asked to review reports and photos regarding exterior and interior damage. This job hazard analysis is for the Collins Residence jobsite located at 1312 West 60th St North Muskogee, Oklahoma 74403. This a single-family home. This analysis recognizes safety issues that were observed from a review process in June of 2021.

There are many concerns for the safety regards of the site, building, and location that can produce multiple challenges. These will need to be worked through with regard of the safety

material handling and staging, as well as client and personnel safety to ensure that all people in and near the site will have safe access during the day and evening. The work that is going to be done on this building will include the following but is not limited to: reroofing work, interior fire and water damage and any unforeseen damage that may exist. The wind is a concern due to the minimal wind block and can rise quickly to concerning speeds. This also forms a safety issue for those working at height, as well as material containment. The General Contractor must take measures to recognize if a wind event is developing to ensure the safety of his personnel, as well as the safety of the personnel and equipment in and around the site. Due to the complex shape of the building, scaffolding will have to be placed on the perimeter of the building. The biggest concern is the structural value of the building due to fire damage, making sure that their safety is of the upmost importance. The clients will have to be informed that the work is being completed and that they will not be able to park near the building. They will have to park in common areas. Also, that they need to be extra careful when entering and exiting the building.

Having a full time Safety Director on site while the work is being done for the full duration is a requirement. This is due to the size and complexity of the job

Exterior of the building

The re-roofing work has many safety hazards that need to be addressed including fall protection for all workers working at height. All workers will need to be tied off on the roof. There will be no exception to these rules. The roof is 12/12 pitch roof. The remaining roof is exposed edge. Because of the exposed edge being most of the roof line fall protection is required. The source of fall protection that can be used is PFAS (Personal Fall arrest System). This system includes a body harness, Yoyo or lanyard, a tie off point or D-Ring or a lifeline. Due to the nature of the roofing system in place the tie off point will have to be mounted to the roof decking. This will require a section of roofing being removed at all tie off locations. It is suggested that a tie off stand is bolted to the deck and left in place when the reroofing is done. The stand will have to be taller than the roofing material so when the roofing is completed the stand can be used for repairs or any other personal that will need to access the area in the future. Another option is a roofing fall protection bag that can be deployed on the roof that is filled with water and personnel can tie off to. The only issue with this system is that the weight can be greater than the allowable roofing load. The roofing contractor will need to make the decision after his review of weight loads.

The roof truss that will need to be replaced will have to be done following the tie off rules that have previously discussed.

All work that will have to be done in the fire affected areas will need to be done with gloves and masks to make sure that the employees are not coming in contact with dangerous carcinogens. This includes the Attics, siding replacement, and brick cleaning or removal.

Material handling will need to be always done. Any material that is placed on the roof must be tied down on the roof to make sure it cannot be blown off. At the end of the day, all material and supplies will be removed from the roof. All debris will need to be contained during removal. Tarps and containment will need to be placed all around the building to capture all debris so none of the

roofing is left behind, for example: roof debris, felt, nails, screws, material with mastic, and roof jacks.

All material will need to be lifted in place and removed with the use of a Skytrax (all-terrain forklift). Material access will be done from the rear of the building and these areas will have to be having to be secured as a control access zone (CAZ). All of the material handling will be done by a Skytrax. A staging area will be set up in a location that has limited access and is protected from day-to-day operations. Fencing of the material laydown location will be required because of public access. SDS sheets will be required to be on site for all materials for quick references in case of emergency. When material is being moved by a Skytrax a spotter/Flagman will have to work with the operator to make sure that traffic is diverted.

All equipment operators will have to be certified to operate the equipment.

Areas of concern on the ground are as follows: barricading of doorways and the driveways will be required while all construction work is being done to the building. Flagmen will also have to be in areas to ensure that people are not walking into construction zones. A control access zone will always be required. All work will have to be done from the front of the building, such as: material and supplies and all liftings. A daily FOD, Foreign Object Debris, walk will have to be done at the end of each day to make sure that there is no material trash or debris left in walkways or accessible points of the building. It is of the utmost importance that no trash makes its way off the building uncontained into any other area.

Barricading will have to be done 10-feet out from the work area and along the walkway. At ground level a scaffold cover will be added to make a cover from falling debris along the walkway as well. There will be no parking close to the building during all construction.

Interior of the building

The interior of the building will need to follow the fire damage rules as well. All work that will have to be done in the fire affected areas will need to be done with gloves and masks to make sure that the employees are not coming in contact with dangerous carcinogens. This includes the Drywall, framing, electrical, solid surface, flooring, and any other affected areas.

It was observed that there is no sprinkler systems in the buildings that can be seen from the pictures. The owners will have to have contents covered or removed for the interior work to be done. Areas that have interior damage will need to be walled off with plastic and have negative air introduced to contain drywall dust and other harmful debris in reviewing the pictures.

Disposal of the material if is confirmed will need to be disposed in an authorized location according to state agencies. The cost for this process can be extensive so making sure that it is done legally and correct is particularly important.

All gas lines will need to be purged and protected before any work can be done on the building. Once the work is completed the lines will have to be tested before they can be recharged.

The air diffusers from the heating and cooling ducts will need to be removed and the ducts will need to be closed off so no dust or contaminants will enter the system. Once the repairs are complete the rooms have been cleaned there will need to be neg air pressure for 24 hours. Once this completed then it can be released back to the residents.

The

Fencing and Barricading.

Signage will have to be installed on all fencing informing that is a construction zone PPE requirements and access requirements and limitations. The General Contractor will always have to hire safety personnel to observe the site to do daily checkoffs of Barricading, fall protection, and other areas that will require a competent person for signoff. Flaggers for all equipment movement will have to be in place due to public access streets. Flaggers must be competent in the flagging process as well as the rules that come with working in and around street closures.

Electrical Subpart K 1926.400

There is possible electrical that can be affected as well as Main power lines in the area. This means that there will have to be an electrician on-site to set ARC Flash protection on the live lines to make sure no one can have access to the live lines. All electrical to the buildings will be left on during work time. Areas of electrical being worked on will be turned off and locked out and tagged out for employee safety. No personnel at any time, while working on the building, can be struck by live Electrical. Generators will be required on the job site. GFI's, whether it be permanent mount or pigtails, are required by OSHA on all construction sites and will be observed daily. All electrical items will meet all OSHA standards listed in Subpart K 1926.400.

Signs, Signals, And Barricading Subpart G 1926.200

Signage will have to be installed on all fencing, informing that the area is a construction zone, PPE requirements, and access requirements and limitations. The General Contractor will have to hire safety personnel and a Safety Director to observe the site at all times to do daily check offs of scaffolding fall protection and other areas that will require a competent person for signoff. Flaggers for all equipment movement will have to be in place, due to public access streets. Flaggers have to be competent in the flagging process as well as the rules that come with working in and around street closures. All sign, signals, and barricading items will meet all OSHA standards listed in Subpart G 1926.200.

All building access entrances will have to be covered with scaffolding bridges built for pedestrian access to the building. This will ensure that if any debris or material falls into those areas it will not strike a pedestrian.

PPE Personal Protective and Life Saving Equipment Subpart E 1926.95

Hard hats, safety glasses, vest or high-vis shirts, gloves, dust masks, work boots, and fall protection will always be required on the site until the site is complete. Specialty items such as respirators and ARC flash gear will need to be worn by certified workers in their area of expertise. All PPE items will meet all OSHA standards listed in Subpart E 1926.95.

Scaffolding Subpart L 1926.450

In the unlikely event that Scaffolding is used for edge work the Foreman will have to sign off that the Scaffolding is safe and secure on a daily basis. This area also covers all work being done from scissor lifts and boom lifts. All scaffolding will need to meet OSHA rules listed in Subpart L 1926.450

Fall Protection Subpart M 1926.500

All employees working at height will need to have fall protection on. The employees will need to make sure that their tie offs are located above them and all tools are tied off. All fall protection will meet Subpart M 1926.500

Fire Protection and Prevention Subpart F 1926.150

Fire extinguishers will have to be placed on site. (1) 5 lb. and (2) 2.5 lb. Will always have to be on site.

Aerial Lifts Sub Part L Scaffolds 1926.453

All Aerial lifts that are used on this work site must comply with Subpart L 1926.453. This includes Fall protection requirements as well as 1926.453(a)(1). Unless otherwise provided in this section, aerial lifts acquired for use on or after January 22, 1973, shall be designed and constructed in conformance with the applicable requirements of the American National Standards for "Vehicle Mounted Elevating and Rotating Work Platforms," ANSI A92.2-1969, including appendix. Aerial lifts acquired before January 22, 1973, which do not meet the requirements of ANSI A92.2-1969, may not be used after January 1, 1976, unless they shall have been modified so as to conform with the applicable design and construction requirements of ANSI A92.2-1969. Aerial lifts include the following types of vehicle-mounted aerial devices used to elevate personnel to job sites above ground.

NFPA 70E (ARC Flash)

NFPA 70E, titled Standard for Electrical Safety in the Workplace, is a standard of the National Fire Protection Association (NFPA). The document covers electrical safety requirements for employees. The NFPA is best known for its sponsorship of the National Electrical Code (NFPA 70).

Renovation and Demolition of Buildings

Air toxics regulations under the Clean Air Act specify work practices for Hazards Material to be followed during demolitions and repairs of all facilities, including, but not limited to, structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units).

The regulations require a thorough inspection of where the demolition or renovation operation will occur. The regulations require the owner or the operator of the renovation or demolition operation to notify the appropriate delegated entity (often a state agency) before any demolition, or before any renovations of buildings that contain a certain threshold amount of regulated Hazards Material -containing Material. The rule requires work practice standards that control Hazards Material emissions. Work practices often involve removing all Hazards Material -including materials, adequately wetting all regulated Hazards Material -containing materials, sealing the Material in leak-tight containers, and disposing of the Hazards Material -containing waste material as expediently as practicable, as the regulation explains in greater detail.

If there are any questions that arise during the construction time, the General Contractor is to contact 1 Life Safety directly and immediately

SAFETY-PROTOCOL (GENERAL)

SAFETY PROTOCOL (GENERAL)

Job hazards

Hazards are all around and limitless in an industrial facility that can lead to minor cuts all the way to a life threatening injury. They include but aren't limited to the following:

- I. Building Exterior - Power tools, slip and fall dangers, power and accessory cables, run along floors and walkways, tow bars, tool carts, and fluid spills.
- II. Staging Area - Falling material, sharp edges, trip hazards, blowing debris, wildlife, and vehicles.

Initial Safety Briefing

Briefing orients newly assigned employees to this organization's safety program and an overall review of the hazards. Conducted within one week of employee's arrival to the company or prior to the first day on the site, whichever is first. Given by General Contractor Safety representative or designated personnel (make it relevant and interesting). Below is a list of items that should be covered at a minimum. Log of personnel briefed kept on file in safety office.

Briefing Topics

- General Safety
- Safety Philosophy
- The individual's role in the safety program
- Foreign Object Damage Prevention Program
- Safety and CSP POCs
- Accident Plan
- Individual Responsibilities
- Discuss when reports are required
- Local Requirements (registration, inspections)
- Fire Prevention
- Off Limits Area

Personal Protection Equipment (PPE) Guidelines (1926.95 Subpart E)

All locations will require hard hats, safety glasses, high-Vis vests, steel toe boots, long pants, sleeved shirts, and cut proof gloves. Spotters and flagmen will also carry lights if work is to be done before dawn or after dusk. All tools will need to be lanyard secured to the person working with them to ensure that no fall from a height can happen. It is also suggested that all screws and bolts be contained in dump proof bags or containers.

Protecting Your Eyes

- Safety glasses or goggles

May be tinted, coated for anti-fogging, or fitted with prescription lenses. Anytime you are in danger of injury by flying objects, your safety glasses must be fitted with side shields.

When wearing goggles, check that they fit your face snugly, sealing the entire eye area. Face shields can be worn with safety glasses or goggles for extra protection. If you are exposed to injurious light rays or other radiant energy you will need goggles, helmets, or face shields equipped with special filters.

- Prescription glasses and contact lenses

Will not protect your eyes. In fact, wearing contact lenses alone can even be more hazardous because dust or material may lodge under the lenses, causing injury to your eye.

Protecting Your Hearing

If noise levels are high in your workplace, you should wear hearing protection. Excessive noise not only damages your hearing, but it may also fatigue and stress workers. These effects can lead to accidents and mistakes that may result in other injuries. The goal of hearing protection is to reduce your exposure to harmful noise while at the same time enabling you to hear machine warnings and conversations. Hearing protection falls into two broad categories - earplugs and earmuffs.

OSHA has prescribed the limits established by the American Conference of Governmental Industrial Hygienists as a standard for occupational noise exposure. Both the sound pressure level of the noise and the total duration of the noise exposure are considered to determine if these limits are exceeded.

Exposure to noise equaling or exceeding 85 DBA for an eight-hour period (referred to as a time- weighted average) establishes the point at which the Company develops a hearing conservation program. Whenever the time-weighted average exposure (TWA) exceeds 85 DBA, the Company department does the following:

- Monitors, or has monitored the noise levels the employee(s) is exposed. This requires the use of noise level meters and personal dosimeter equipment.
- Maintain written records of the exposure monitoring for at least two years.

- Establishes and maintains an audiometric testing program for the employee. This includes annual testing at no cost to the employee and evaluation of the results by a trained technician.
- Informs the employee of any threshold shift in their ability to hear.
- Takes steps through engineering or administrative procedures to reduce the employee exposure to less than 85 DBATWA.
- Provides hearing protectors for employees and requires their use for the following employees:
 - Those employees exposed to more than 85 DBA and
 - Have not had a baseline audiometric test, or
 - Those whose audiometric exams have indicated a threshold shift.
 - Those exposed to more than 90 DBA for an eight-hour TWA.

The Company provides hearing protectors for employees who are required to use them for protection against noise exposure. These protectors will include different types and sizes to meet the variety of fit requirements of employees.

Employees exposed to noise requiring the use of hearing protectors are trained in the use and fit of the protectors. Should anyone believe that they are exposed to noise levels more than the above levels, it should be reported, and the appropriate measures of the exposure will be made.

- Radio headsets

Are not acceptable for hearing protection or allowable when operating any Company equipment.

- Earplugs

Earplugs are made of light and comfortable material and fit in the ear itself. They range from foam disposable cylinders to customized molded plugs. To insert foam earplugs, roll the plug between your thumb and forefinger until it is completely compressed, with the opposite hand, pull the outer ear out and up, and then insert the plug as far into your ear as possible, but not too far. A comfortable fit is all you need.

- Earmuffs

Earmuffs are cushioned and cupped ear coverings attached to a head band. Earmuffs come in a wide variety of sizes and kinds. They are made specifically for certain noise levels and work environments. When using earmuffs, you must make certain there is a perfect seal between the muff and the skin around the ear.

- Otherwise, the earmuffs will offer little protection. Always make sure that your hair, jewelry, and glasses do not interfere with this seal.

In areas where there are extreme noise levels, workers often wear both earplugs and earmuffs at the same time. Check with your supervisor to see what hearing protection is appropriate for you to wear in your workplace.

Protecting Your Head

If your workplace has falling object hazards or exposed electrical conductors, you must wear a hard hat to protect you from a head injury. The hat's shell and suspension act as a shock-absorption system. The head band, straps, and a one-inch space between the shell and the straps work together to protect you from impact hazards. There are three classes of hard hats:

- Class A

Made of a non-conductive material and protects against electrical hazards and falling objects.

- Class B

Made of a non-conductive material and offers the most electrical protection up to 20,000 volts.

- Class C

Offers protection from falling objects only. It is unsuitable for use around electrical hazards or in environments where corrosive chemicals are present.

Warnings and Precautions

- Never alter or modify the hard hat shell or suspension. This can drastically reduce the amount of protection provided.
- Drilling holes in the hard hat shell for ventilation purposes must be prohibited always.
- Always avoid contact of the hard hat with electrical wires.
- Never use a suspension that is not intended for use with a particular shell or one that is made by a different manufacturer.
- Never carry or wear anything inside of your hard hat between the suspension and the shell.
A clearance must be maintained between the hard hat shell and the wearer's head for the protection system to work properly.
- A ball cap or other object may limit this clearance. An object placed under the cap may also contain metal parts that may diminish the dielectric protection provided by the hat. There are some products such as winter liners and sunshades that are designed specifically to work in conjunction with hard hats.
- Be sure to follow manufacturer's recommendations for the use of these products.

Hard Hats Worn Backward

There is considerable confusion and misinterpretation about whether OSHA allows hard hats to be worn backward. An OSHA Standard Interpretation and Compliance Letter dated July 22, 1992, states:

"Because ANSI only tests and certifies hard hats to be worn with the bill forward (sic), hard hats worn with the bill to the rear would not be considered reliable protection and would not meet the requirements of 29 CFR 1926.100 (a) and (b) unless the hard hat manufacturer certifies that this practice meets the ANSI requirements."

Prior to allowing employees to wear their hats backward, always get written verification from the hard hat manufacturer on whether your hard hat model has been tested and found to be compliant with the requirements of the American National Standards Institute standard when worn with the bill turned to the rear. The manufacturer may specify that proper performance requires the suspension to be reversed in the helmet so that the head band is oriented normally to the wearer's head (i.e., with the brow pad against the forehead and the extended nape strap at the base of the skull). In this manner, only the shell of the helmet is positioned backward on the head.

If you are ever in doubt about the use or maintenance of your hard hat, contact the manufacturer directly for instructions and recommendations. The cost of maintaining and replacing your hard hat is well worth the benefits.

If the hard hat you put on every day is 10 years old and brittle from age, yet comfortable and familiar, do yourself and your family a favor by retiring it. Set it on your shelf as a keepsake and replace it with a hard hat that can provide the intended protection.

Protecting Your Hands

You should wear gloves if your work exposes you to temperature extremes or harmful substances that can be absorbed through the skin. You should also wear gloves to prevent severe cuts, lacerations, abrasions, punctures, chemical burns, and thermal burns.

No single glove type will protect you against all potential hand hazards. As with most PPE, you must choose the right protection for the job. There are four glove classifications:

- General Purpose

Made of either leather or cotton these gloves offer minor protection from abrasions, cuts, punctures, snags, and minor temperature variations. Leather - being a heavier material - gives overall tougher protection. It will also protect against extreme heat and sparks.

- Cut-Resistant

Made of wire or metal mesh these gloves contain Kevlar, Aramid, or Spectra yarns to reinforce their cut resistance.

- Special Purpose

Manufactured per the jobs for which they are needed. For example, firefighters and smelter workers use specifically insulated gloves designed for use in extreme heat.

- Chemical-Resistant

Prevents contact with and absorption of hazardous chemicals into your body. Because these gloves need to be non-porous, they are usually made of many different materials such as nitrile, neoprene, butyl rubber, or natural rubber.

Before putting on your gloves, always inspect them for rips, holes, or anything that may weaken their effectiveness. If a damaged glove can be repaired, have it repaired immediately. Otherwise, dispose of them and get a new pair.

Always be sure that your gloves fit well. A glove too big or small for your hand will not offer adequate protection.

Protecting Your Feet

A small object may cause the typical workplace foot injury. The object may be no heavier than seven pounds and may be dropped from a height of less than four feet. Most workers who have suffered foot injury were not wearing safety shoes or boots at the time of the accident.

Protective footwear is designed to guard the feet from impact and compression injuries. Like other safety equipment, the type of protective footwear you need depends upon your job. Some examples of foot protection you might need to avoid hazards while on the job are:

- If you work with packages, objects, parts, or heavy tools, you should wear sturdy protective footwear that has a steel-reinforced toe area.
- If you work in areas where there is the potential for sharp objects to penetrate your feet, wear shoes with puncture-resistant soles.
- If your workplace has exposed electrical circuits or wires, you should wear non-conductive shoes.
- If you need to keep free from static charges, you should wear conductive footwear that will drain static charges harmlessly into the ground.
- If you encounter chemicals, you should wear specially coated footwear that will keep hazardous chemicals away from your feet. Full-Protective Clothing.

- Certain situations require the body to be totally covered and protected. Some workers need fire-retardant clothing when working on high-voltage equipment. If you are a healthcare worker, you may need lead-lined clothing to diminish your exposure to x-rays. If you work around traffic, you may need high-visibility clothing. If you work in an area with a high degree of heat, you may need clothing made of a heat-resistant material such as leather.

If you work with chemicals, you need some of the toughest PPE: chemical-protective clothing made of nitrile, neoprene, butyl rubber, or natural rubber. This type of PPE is necessary in cases where chemicals absorbed through the skin could cause death, injury, or serious illness.

Chemical-Protective Clothing

- Disposable

Disposable suits are generally lighter and require little maintenance.

- Reusable

Reusable suits required both decontamination and extensive maintenance but would last longer than disposable suits.

Know the Limitations

PPE gives you a personal line of defense. But PPE should never give you a false sense of security. It's there to protect you in case other safety measures fail. Wear PPE as an added safety feature, not a substitute for other necessary safety procedures.

Familiarize yourself with the limitations of your PPE. Once you know the limitations of the PPE, do not exceed them.

When selecting one piece of PPE to be used with another consider the compatibility between them. Sometimes, one piece of PPE can interfere with the operation of another. For example, safety glasses may prevent a pair of earmuffs from creating the necessary seal between your skin and the earmuff to protect your ear from excessive noise exposure.

Maintenance and Disposal

Always clean and maintain your PPE properly. Dirty or worn equipment may lose its protective ability. The following are examples of proper PPE maintenance and disposal.

- Wash reusable ear plugs with soap and warm water. Check for any cracks or tears.
- Throw away disposable earplugs at the end of your shift.
- Make sure goggles are clean and straps are in good condition.

- Check your hard hat before each use for cracks, dents, discoloration, brittleness, frayed, or torn suspension. Replace all damaged parts or the entire hat if necessary.
- Make sure you wash your hat at least once a month by soaking the shell and assembly for five minutes in lukewarm water and mild soap.
- Keep gloves and footwear as clean as possible. Check them regularly for tears or worn areas.
- Replace if necessary.
- Become familiar with the life span of PPE and dispose of any defective clothing immediately.

If your PPE is defective or damaged, alert your supervisor immediately. Make sure that it is repaired or replaced. Never use worn or defective PPE. You violate OSHA regulations, endanger yourself, and put your company at risk by using damaged equipment.

Whether you need eye, face, ear, head, hand, foot, or total body protection, you need to use the right personal protective equipment to reduce your risk of injury.

OSHA Fall Protection (1926.500 Subpart M)

Fall protection is going to be used at any working surface above 6 ft. Equipment will be inspected daily and the employee that is using the equipment will be trained in the equipment. Prove will be expected on site. All tie off locations will be able to withstand 5000 pounds of down force.

It is the responsibility of GC to ensure that all employees understand and adhere to the procedures of this plan and follow the instructions of the "competent person." A "qualified person" or a registered engineer must approve any changes to this plan.

PURPOSE

The purpose of this fall protection program is to establish guidelines to protect all employees engaged in outdoor or indoor work activities that expose them to potential falls from elevations.

This Fall Protection Program has been developed to prevent the occurrence of falls from elevations of 6 feet or higher. This goal will be accomplished through effective education, engineering, administrative controls, use of all protection systems, and enforcement of the program. This fall protection program will be continually improved upon to prevent all falls from occurring.

Fall protection is required whenever a worker faces a serious risk of injury, including:

- On structures where a worker could fall more than 6 feet; on thrust outs, trusses, beams, purlins, and plates at heights over 6 feet; on a sloped roof.

- To prevent accidental falls at work sites, guardrails, and toe boards or other effective barriers to falls should be used. However, there will be areas where guardrails or other barriers are not feasible. In these cases, workers must use approved personal fall protection systems or positioning devices.
- Two common types of personal fall protection systems that require tie off are fall arrest and travel restraint. Fall arrest systems stop a fall within a few feet of the worker's original position.

A full body harness is required with a fall arrest system. The system typically consists of a full body harness, a lanyard, a rope grab, a lifeline, and a lifeline anchor. A fall arrest system must be worn when working on a rolling scaffold that is being moved, or when a worker is getting on, working from or getting off suspended access equipment.
- A travel restraint system prevents falls by restraining a worker from getting too close to an unprotected edge. This system usually consists of a safety belt or full body harness, a lanyard, a rope grab, a lifeline, and a lifeline anchor.
- When conventional or personal fall protection is not practical, safety nets must be used instead. Before using safety nets, check to see that the nets are hung with enough clearance to prevent a falling person from hitting the surface or structure below.
- Safety nets should be placed within 10 vertical feet and never more than 30 feet below the working surface. Nets must extend at least eight feet beyond the building or structure. If the vertical distance from the working level to the net is greater than 5 feet, then the net must extend 10 feet beyond the building. A net from 10 feet to 30 feet below the working surface must extend 13 feet.
- If you use any type of fall protection equipment including personal fall protection or safety nets, be sure to check that you are using the right equipment for the job, labeled as meeting the requirements of the American National Standards Institute (ANSI) and that the equipment is in good condition.
- Whenever feasible, employers should always set up temporary floors, guardrails, toe boards, or other physical barriers to falls instead of having workers rely on tying off and nets for fall protection. When not feasible, personal fall protection or safety nets must be used. No work should proceed unless the necessary fall protection is in place. The use of fall protection can prevent serious injury and save your life.

Falling Object Protection

In addition to wearing hard hats, each employee on a scaffold shall be provided with additional protection from falling hand tools, debris, and other small objects through the installation of toe boards, screens, or guardrail systems or through the erection of debris nets, catch platforms, or canopy structures that contain or deflect the falling objects. Guardrails shall be 2 x 4 inches or the equivalent, approximately 42 inches high, with a mid-rail when required. Supports shall be at intervals not to exceed 8 feet.

Toe boards shall be a minimum of 4 inches in height. Where there is a danger of tools, material, or equipment falling from a scaffold and striking employees below, the following provisions apply:

- A toe board shall be erected along the edge of the platforms more than 10 feet above lower levels for a distance sufficient to protect employees below. Toe boards will be capable of withstanding a force of at least 50 pounds applied in any downward or horizontal direction at any point along the toe board. Toe boards shall be securely fastened in place at the outermost edge of the platform and have not more than ¼ inch clearance above the walking/working surface. Toe boards shall be solid or with openings not over one inch in the greatest dimension.
- Where tools, materials, or equipment are piled to a height higher than the top edge of the toe board, paneling, or screening extended from the toe board or platform to the top of the guardrail shall be erected for a distance enough to protect employees below.
- A guardrail system shall be installed with openings small enough to prevent passage of potential falling objects.
- A canopy structure, debris net, or catch platform strong enough to withstand impact forces of the potential falling objects shall be erected over the employees below.

It should be noted that the descriptions of standards provided in this format should not be considered a complete interpretation or expression of such standards. If complete details of specific standards are required, review the applicable standard in 29 CFR PART 1926.

This Fall Protection Plan is based on OSHA regulation 29 CFR Part 1926 Subpart M Fall Protection and is not intended as a complete interpretation of standards. For a complete source of information, consult 29 CFR Part 1926 Subpart M - Fall Protection.

OSHA Guidelines

Employers must determine if walking/working surfaces meet certain requirements.

- Has employer determined if the walking/working surfaces on which employees are working have the strength and structural integrity to support employees safely?
- Verify that employees can work only on those surfaces that have the requisite strength and structural integrity.
- Employees on a walking/working surface must be protected from falling under certain circumstances.
- Verify that each employee on a walking/working surface (horizontal and vertical) with an unprotected side

- or edge that is 6 ft. or more above a lower level is protected from falling using guardrail systems, safety net systems, or personal fall arrest systems.
- Employees who are constructing leading edges or working nearby must be protected from falling.
- Verify that each employee who is constructing a leading edge that is 6 ft. or more above lower levels is protected from failing using guardrail systems, safety net systems, or personal fall arrest systems.
- Verify that each employee who is constructing a leading edge that is 6 ft. or more above lower levels is protected from failing using guardrail systems, safety net systems, or personal fall arrest systems.

ALSO: When an employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer must develop and implement a fall protection plan that meets the requirements of 29 CFR 1926.502(k). However, there is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems; accordingly, the burden of proof is on the employer to establish that it is appropriate to implement the fall protection plan only.

Verify that each employee on a walking/working surface 6 ft. or more above a lower level where leading edges are under construction, but who is not engaged in the leading-edge work is protected from falling by a guardrail system, safety net system, or personal fall arrest system.

Employees on walking/working surfaces with holes must be protected from falling.

- Verify that each employee on walking/working surfaces is protected from falling through holes (including skylights) more than 6 ft. above lower levels by personal fall arrest systems or covers or guardrail systems erected over or around such holes.
- Verify that each employee on a walking/working surface is protected from tripping in or stepping into or through holes (including skylights) by covers.
- Verify that each employee on a walking/working surface is protected from objects falling through holes (including skylights) by covers.
- Employees above dangerous equipment must be protected from falling.
- Verify that each employee less than 6 ft. above dangerous equipment is protected from falling into or onto the equipment by Guardrails systems or by equipment guards.
- Verify that each employee 6 ft. (1.8 m) or more above dangerous equipment is protected from fall hazards by guardrail systems, personal fall arrest systems, or safety net systems.
- Employees engaged in roofing activities on low slope roofs must be protected from falling.

Except as provided otherwise in 29 CFR 1926.501 (b), verify that each employee engaged in roofing activities on low sloped roofs, with unprotected sides and edges 6 ft. or more above lower levels is protected from falling, by any of the following: guardrail systems; safety net systems; personal fall arrest systems; a combination of a warning line system and guardrail system; a combination of a warning line system and safety net system; a combination of a warning line system and personal fall arrest system; a combination of a warning line system and safety monitoring system; or a safety monitoring system alone (on roofs 50 ft. or less in width only).

Employees on a steep roof must be protected from falling.

- Verify that each employee on a steep roof with unprotected sides and edges 6 ft. or more above lower levels is protected from falling by guardrail systems with toe boards, safety net systems, or personal fall arrest systems.

Employees engaged in the erection of pre-cast concrete members must be protected from falling.

- Verify that each employee who is engaged in the erection of pre-cast concrete members (including but not limited to the erection of wall panels, columns beams, and floor and roof "tees") and related operations (such as grouting of precast concrete members) and who is 6 ft. or more above lower levels is protected from falling by any of the following (unless 29 CFR 1926.501 (b) provides for an alternative fall protection measure: guardrail systems; safety net systems; or personal fall arrest systems.

ALSO: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer can develop and implement a fall protection plan that meets the requirements of 29 CFR 1926.502(k). However, there is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems; accordingly, the burden of proof is on the employer to establish that it is appropriate to implement the fall protection plan only.

Employers must provide protection from falling objects.

- Verify that when employees are exposed to falling objects, the employer has each employee wear a hard hat and implements one of the following actions: erects toe boards, screens, or guardrail systems to prevent objects from falling from higher levels; erects a canopy structure and keeps potential fall objects far enough from the edge of the higher level so that objects will not go over the edge if they are accidentally displaced; or barricades the area to which objects could fall, prohibits employees from entering the barricaded area, and keeps objects that may fall far enough away from the edge of the higher level so that those objects will not go over the edge if they are accidentally displaced.

TYPES OF FALL PROTECTION SYSTEMS

- Articulating man lift
 - An articulating man lift is provided with a restraint system and a full body harness attached to an anchor point below the waist (preferably at the floor level).
- Guardrails with toe boards.
- Personal fall arrest systems.
- Anchor points (rated at 5,000 pounds).
- Full body harnesses.
- Restraint line or lanyard.
- Shock absorbing lanyard.
- Retractable lanyard.
- Rope grabs.
- Connectors (self-locking snap hooks).
- Engineered lifelines.
- Warning lines.
- Safety nets.
- Safety monitor systems.

Appropriate fall protection will be determined by the task (job) to be performed.

FALL PROTECTION LOCATIONS

Fall protection is required wherever the potential to fall 6 feet or more exists. The following work site locations have been identified for fall protection:

- All flat and low sloped roof locations when within 6 feet of the roof edge or during roof repair/maintenance (4:12 pitch or less).
- All exterior and interior fixed ladders above 20 feet.

- All mezzanine and balcony edges.
- All tasks require the use of the articulating man lifts.
- All tasks requiring employees to lean outside the vertical rails of ladders (i.e., painting, stairwell light bulb replacement, etc.).
- Scaffolding erection - 10 feet in height or greater.
- Mezzanine/catwalk areas - whenever an employee must step outside the catwalk additional fall protection (i.e., 6-foot lanyard to full body harness, SRL, or rope grab system) should be used.
- Fall protection is not needed if an employee or employees are on a low slope roof (less than 4/12 pitch) for inspection/ observation only!

FALL PROTECTION GUIDELINES - OPTIONS

a. Engineering Controls

This should always be our first option for selection whenever possible (i.e., light bulb changing, telescoping arm, changing valve, relocate at ground level) or utilizing a contractor in extremely hazardous areas.

b. Guardrails

On all projects, only guardrails made from steel, wood, and wire rope will be acceptable. All guardrail systems will comply with the current OSHA standards (i.e., withstand 200 pounds of force, 42" high, mid-rail, and toe board). These guardrails will be placed in the following areas if necessary or feasible based on job location or requirements:

- On all open sided floors.
- Around all open excavations or pits.
- On leading edges of roofs or mezzanines.

See Appendix B for guidelines on guard rails

c. Personal Fall Protection Systems

All employees on any project that will be required to wear a personal fall arrest or restraint system will follow these guidelines:

- A full body harness will be used always.

- All personal fall arrest systems will be inspected before each use by the employee.
- Any deteriorated, bent, damaged, impacted and/or harness showing excessive wear will be removed from service.
- Connectors will be inspected to ensure they are drop forged, pressed, or formed steel or are made of equivalent materials and that they have a corrosion resistant finish as well as that all surfaces and edges are smooth to prevent damage to interfacing parts of the system.
- Verify that D rings and snap hooks have a minimum tensile strength of 5,000 lbs. and that the D rings and snap hooks are proof tested to a minimum tensile load of 3,600 lbs. without cracking, breaking, or taking permanent deformation.
- Only shock absorbing lanyards or retractable lanyards are to be used to keep impact forces at a minimum on the body (fall arrest systems).
- Only nylon rope or nylon straps with locking snap hooks are to be used for restraints.
- All lanyards will have self-locking snap hooks.
- Verify that unintentional disengagement of snap hooks is prevented by either of the following means:
- Snap hooks are a compatible size for the member to which they are connected.
- Locking type snap hooks are used. (Effective January 1998, only locking type snap hooks may be used)

Verify that unless the snap hook is a locking type and is designed for the following connections, snap hooks are not engaged in the following manners: directly to webbing, rope, or wire rope to each other; to a D ring to which another snap hook or another connector is attached; to a horizontal lifeline; or to any object that is incompatibly shaped; or dimensioned in relation to the snap hook such that unintentional disengagement could occur by the connected object being able to depress the snap hook keeper and release itself.

The maximum free fall distance is not to exceed 6 feet. Consideration must be given to the total fall distance. The following factors can affect total fall distance:

- The length of connecting means (i.e., lanyard length, use of carabiners, snap hooks, etc.).
- Position and height of anchorage relative to work platform/area (always keep above head whenever possible).
- The position of attachment and D-ring slide on the full body harness.
- Deployment of the shock absorber (max 42").

- Movement in a lifeline.
- The initial position of the worker before free fall occurs (i.e., sitting, standing, etc.).

Calculating Total Fall Distance

It is the total length of shock absorbing lanyard + height of the person + the location distance of the D-ring from the work surface or platform.

Always allow a minimum of 6 feet of clearance above the ground, equipment, etc. at the end of the fall from the fall arrest point.

Engineered Lifeline

Lifeline systems must be designed and approved by an engineer or qualified person.

Lifeline systems must be engineered to have appropriate anchorages, strength of line designed to hold X number of individuals connected to it, line strength to aid in the arrest of a fall, and durability to hold a fallen employee(s) suspended until rescue can occur.

See Appendix C for guidelines on lifelines.

Warning Line System

All greater than 50 feet wide flat roof (i.e., roof with less than 4/12 slope) work which is performed 6 feet or further back from the edge of the roof can be completed by installing a Warning Line. Warning Lines will consist of the following:

- Will be erected 6 feet from the edge of the roof.
- Be constructed of stationary posts made of wood or metal or Standalones.
- Wire or nylon rope and "Caution" tape will be strung from post to post and must be able to withstand 16 pounds of force.
- The entire perimeter of the roof where work is being performed will be guarded by the warning line.

If an employee must access an area within 6 feet of the roof for reasons other than exiting the roof via a ladder or fixed industrial ladder, another employee must monitor that individual and warn him/her of any dangers. If another employee is not available to act as a safety monitor, then the employee must don a full body harness and attach a fall restraint lanyard to an anchor point to prevent reaching the edge of the roof.

INSPECTION OF FALL PROTECTION SYSTEMS

The following criteria will be utilized to maintain all equipment in good working condition. Please note that there are inspection forms for the various equipment listed below in the attached addendum 2.

Full Body Harnesses

- Inspect before each use.
- Closely examine all the nylon webbing to ensure there are no burn marks, which could weaken the material.
- Verify there are no torn, frayed, broken fibers, pulled stitches, or frayed edges anywhere on the harness.
- Examine D-ring for excessive wear, pits, deterioration, or cracks.
- Verify that buckles are not deformed, cracked, and will operate correctly.
- Check to see that all grommets (if present) are secure and not deformed from abuse or a fall.
- The harness should never have additional punched holes, all rivets should be tight not deformed.
- Check tongue/straps for excessive wear from repeated buckling.
- Annual inspection of all harnesses will be completed by a competent person; documentation will be maintained on file (see Addendum 2).
- Storage will consist of hanging in an enclosed cabinet, to protect from damage.
- All harnesses that are involved in a fall will be destroyed.

Lanyards/Shock Absorbing Lanyards:

- Inspect before each use.
- Check lanyard material for cuts, burns, abrasions, kinks, knots, broken stitches, and excessive wear.
- Inspect the snap hooks for hook, locks, and eye distortion.
- Check carabineer for excessive wear, distortion, and lock operation. Ensure that all locking mechanisms seat and lock properly.
- Once locked, locking mechanism should prevent the hook from opening.
- Visually inspect shock absorber for any signs of damage, paying close attention to where the shock absorber attaches to the lanyard.
- Verify that points where the lanyard attaches to the snap hooks are free of defects.
- Annual inspection of all lanyards will be completed by a competent person; documentation will be maintained; storage will consist of hanging in an enclosed cabinet to protect from damage.
- All lanyards that are involved in a fall will be destroyed.

Snap hooks.

- Inspect before each use.
- Inspect snap hook for any hook and eye distortions.
- Verify there are no cracks, pitted surfaces, and eye distortions. The keeper latch should not be bent, distorted, or obstructed. Verify that the keeper latch seats into the nose without binding. Verify that the keeper spring securely closes the keeper latch.
- Test the locking mechanism to verify that the keeper latch locks properly.
- Annual inspection of all snap hooks will be completed by a competent person; documentation will be maintained (see Addendum 2).
- All snap hooks involved in a fall will be destroyed.

Self-Retracting Lanyards

- Inspect before each use.
- Visually inspect the body to ensure there is no physical damage to the body. Make sure all back nuts or rivets are tight.
- Make sure the entire length of the nylon strap is free of any cuts, burns, abrasions, kinks, knots, broken stitches, and excessive wear and retracts freely.
- Test the unit by pulling sharply on the lanyard to verify that the locking mechanism is operating correctly.
- If the manufacturer requires, make certain the retractable lanyard is returned to the manufacturer for scheduled annual inspections.
- The monthly inspection will be conducted by a competent person with documentation maintained (see Addendum 2).
- Service per manufacturer specifications (1-2 years).
- Inspect for proper function after every fall.

Tie-off Adaptors/Anchorages

- Inspect for integrity and attachment to the solid surface.
- Annual inspection of all tie-offs and anchorages by a competent person with documentation.
- All tie-offs and anchorages will be destroyed and replaced after a fall.

Articulating Man Lift

- Inspect before each use.
- Inspect/service per manufacturer guidelines. Forklift, scissors lifts, and safety nets will be inspected at the beginning of each shift in use. Structural integrity or forklift basket will be checked per the same schedule.
- Annual inspection of forklift basket will be completed by a competent person with documentation maintained.

Horizontal Lifelines

- Inspect before each use for structural integrity of line and anchors.
- Annual inspection by a competent person.

Guardrails

- Temporary systems - Daily visual inspection will be completed by a competent person.
- Temporary systems - Weekly, a complete structural inspection will be completed by a competent person.
- Permanent Systems - Annual structural inspection will be completed by a competent person with future frequency of inspection defined based on conditions/controls present.

STORAGE AND MAINTENANCE OF FALL PROTECTION EQUIPMENT

- Never store the personal fall arrest equipment in the bottom of a toolbox on the ground, or outside, exposed to the elements (i.e., sun, rain, snow, etc.).
- Hang equipment in a cool dry location in a manner that retains its shape.
- Always follow manufacturer recommendations for inspection.
- Clean with a mild, nonabrasive soap, and hang to dry.
- Never force dry or use strong detergents in cleaning.
- Never store equipment near excessive heat, chemicals, moisture, or sunlight.

- Never store in an area with exposures to fumes or corrosives elements.
- Avoid dirt and buildup on equipment.
- Never use this equipment for any purpose other than personal fall arrest.
- Once exposed to a fall, remove equipment from service immediately.

TRAINING

Employers must provide a fall prevention training program for each employee who might be exposed to fall hazards. The training program must include recognition of the hazards of failing and procedures to follow to minimize these hazards. Training materials must be reviewed to verify that each employee has been trained, as necessary, by a competent person qualified in the following areas: nature of fall hazards in the work area; the correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used; the use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, CAZS, and other protection to be used; the role of each employee in the safety monitoring system when this system is used; the limitations on the use of mechanical equipment during the performance of roofing work on low sloped roofs; the correct procedures for the handling and storage of equipment and materials and the erection of overhead protection; the role of employees in fall protection plans; the requirements contained in 29 CFR 1926 Subpart M. understanding and following all components of this fall protection program and identifying the enforceable OSHA standards and ANSI standards that pertain to fall prevention.

Employers must maintain a written certification record for employee training. The record must contain the following information:

The name or other identity of the employee trained the date(s) of the training and the signature of the person who conducted the training or the signature of the employer.

ALSO: When the employer has reason to believe that any affected employee who has already been trained does not have the understanding and skill required by 29 CFR 1926.503(a), the employer must retrain that employee. Retraining is required at least in the following circumstances: changes in the workplace render previous training obsolete, changes in the types of fall protection systems or equipment to be used render previous training obsolete, or inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill.

HAZCOM Plan

SDS sheets will be provided by the MGM for the personnel working in the area to make sure they understand the risk of material in the work area that may have been left by the site personnel. See HAZCOM plan below.

Hazard Communication and Hazardous Waste Briefing

- Site supervisor: Review this form with workers prior to release into the work area. Once this form is completed it will be kept on file with 1 LIFE SAFETY. safety rep.
- Individual: In conjunction with the Hazard Communication Program, this briefing will give you specific work area information. This brief will be given by the site supervisor prior to your release into the work site. Once the brief is completed and the form signed, it will be held by the 1 LIFE SAFETY. Safety rep.
- Work Area _____
- Required briefing areas:
 - Chemicals and Hazardous Substances you will be exposed to at work.
 - Physical effects of hazardous chemicals you will be working with.
 - Proper handling and storage of such chemicals.
 - Location of Safety Data Sheets (SDS) and how to read them.
 - Safety and emergency procedures to follow in case of exposure to these chemicals.
 - Enforcement of Personal Protective Clothing and Equipment (PPCE) use.
 - Hazardous Waste disposal procedures and point of contact.
 - Site spill plan procedures.
 - How to lessen or prevent exposure through the usage of control, work practices, and protective equipment.
- The names of the unit HAZCOM/HAZMAT rep.
- I fully understand the contents of this brief. I understand that if I have further questions, I may contact the General contractor, 1 LIFE SAFETY. safety director.
- Worker's full printed name, signature, and date

Fire Suppression Plan

The fire suppression in each building will be fully charged while all work will be done. The GC will need to make sure that all precautions are in place to ensure that the fire suppression system will not be compromised.

Fire Prevention

Due to the random locations of fire extinguishers, we will require a 5lb fire extinguisher be placed at the work location and at the material lay down area. Also, if a generator is being used a fire extinguisher will need to be placed near the unit.

It is the policy of GC to provide to employees the safest practical workplace free from areas where potential fire hazards exist. The primary goal of this fire prevention program is to reduce or eliminate fire in the workplace by heightening the fire safety awareness of all employees. Another goal of this plan is to provide all employees with the information necessary to recognize hazardous conditions and take appropriate action before such conditions result in a fire emergency.

This fire prevention plan complies with the OSHA requirements of 29 CFR 1910.38(b).

This plan details the basic steps necessary to minimize the potential for a fire occurring in the workplace. Prevention of fires in the workplace is the responsibility of everyone employed by the company but must be monitored by each supervisor overseeing any work activity that involves a major fire hazard. Every effort will be made by the company to identify those hazards that might cause fires and establish a means for controlling them.

Classifications

Fires are classified into four groups according to sources of fuel: Class A, B, C, and D.

- Class A - Ordinary combustible materials such as paper, wood, cloth, and some rubber and plastic materials
- Class B - Flammable or combustible liquids, flammable gases, greases and similar materials, and some rubber and plastic materials. Any non-metal in a liquid state is on fire. This classification also includes flammable gases.
- Class C - Energized electrical equipment and power supply circuits and related materials. As long as it's "plugged in," it would be considered a class C fire.
- Class D - Combustible metals such as magnesium, titanium, zirconium, sodium, lithium, and potassium. Unless you work in a laboratory or in an industry that uses these materials, it is unlikely you'll have to deal with a Class D fire. It takes special extinguishing agents (Metal-X, foam) to fight such a fire.

STORAGE AND HANDLING PROCEDURES

The storage of material shall be arranged such that adequate clearance is maintained away from heating surfaces, air ducts, heaters, flue pipes, and lighting fixtures. All storage containers or areas shall prominently display signs to identify the material stored within.

Storage of chemicals shall be separated from other materials in storage, from handling operations, and from incompatible materials. All individual containers shall be identified as to their contents.

Only containers designed, constructed, and tested in accordance with the U.S. Department of Transportation specifications and regulations are used for storage of compressed or liquefied gases. Compressed gas storage rooms will be areas reserved exclusively for that purpose with good ventilation and at least 1-hour fire resistance rating. The gas cylinders shall be secured in place and stored away from any heat or ignition source. Pressurized gas cylinders shall never be used without pressure regulators.

Ordinary Combustibles

Wooden pallets will not be stacked over 6 feet tall. If feasible, extra pallets will be stored outside or in separate buildings to reduce the risk of fire hazards.

Piles of combustible materials shall be stored away from buildings and located apart from each other sufficiently to allow firefighting efforts to control an existing fire.

Flammable Combustibles

Bulk quantities of flammable liquids shall be stored outdoors and away from buildings. Smaller quantities are subsequently brought into a mixing room where they are prepared for use. The mixing room shall be located next to an outside wall equipped with explosion relief vents. The room shall also have sufficient mechanical ventilation to prevent the accumulation of flammable vapor concentrations in the explosive range.

- Small quantities (limited to the amount necessary to perform an operation for one working shift) of flammable liquids shall be stored in, and dispensed from, approved safety containers equipped with vapor-tight, self-closing caps, screens, or covers.
- Flammable liquids shall be stored away from sources that can produce sparks.
- Flammable liquids shall only be used in areas having adequate and, if feasible, positive ventilation. If the liquid is highly hazardous, the liquid shall only be used in areas with local exhaust ventilation.
- Flammable liquids shall never be transferred from one container to another by applying air pressure to the original container. Pressurizing such containers may cause them to rupture, creating a serious flammable liquid spill.
- When dangerous liquids are being handled, a warning sign will be posted near the operation, notifying other employees and giving warning that open flames are hazardous and are to be kept away.

- The storage and usage areas will include fire-resistive separations, automatic sprinklers, special ventilation, explosion-relief valves, separation of incompatible materials, and the separation of flammable materials from other materials.

POLICY ON POTENTIAL IGNITION SOURCES

- Ensure that utility lights always have some type of wire guard over them.
- Don't misuse fuses. Never install a fuse rated higher than specified for the circuit.
- Investigate any appliance or equipment that smells strange. Space heaters, microwave ovens, hot plates, coffee makers, and other small appliances shall be rigidly regulated and closely monitored.
- The use of extension cords to connect heating devices to electric outlets shall be prohibited.
- If a hot or under inflated tire is discovered, it should be moved well away from the vehicle. As an alternative, the driver should remain with the vehicle until the tire is cool to the touch, and then make repairs. If a vehicle is left with a hot tire, the tire might burst into flames and destroy the vehicle and load.

Welding and Cutting

- Welding and cutting will not be permitted in areas not authorized by management.
- If practical, welding and cutting operations shall be conducted in well-ventilated rooms with a fire-resistant floor. If this practice is not feasible, GC shall ensure that the work areas have been surveyed for fire hazards; the necessary precautions are taken to prevent fires and that a work permit has been issued. This work permit shall only encompass the area, item, and time which is specified on it.
- If welding is to be performed over wooden or other combustible type floors, the floors will be swept clean, wetted down, and covered with fire-retardant blankets, metal, or other noncombustible coverings.
- Welding will not be permitted in or near areas containing flammable or combustible materials (liquids, vapors, or dust). Welding will not be permitted in or near closed tanks that contain or have contained flammable liquids unless they have been thoroughly drained, purged, and tested free from flammable gases or vapors. Welding shall not begin until all combustible materials have been removed at least 35 feet from the affected areas, or if unable to relocate, covered with a fire retardant covering. This also applies to walls, partitions, ceilings, or roofs of combustible materials. Openings in walls, floors, or ducts shall be covered if located within 35 feet of the intended work area. Welding will not be permitted on any closed containers.

- Fire extinguishers will be provided at each welding or cutting operation. A trained watcher will be stationed always during the operation and for at least 30 minutes following the completion of the operation. This person will assure that no stray sparks cause a fire and will immediately extinguish fires that do start.

Open Flames

- No open flames will be permitted in or near spray booths or spray rooms. If indoor spray- painting work needs to be performed outside of standard spray-painting booths, adequate ventilation will be provided. All potential ignition sources will also be eliminated.
- Gasoline or alcohol torches shall be placed so that the flames are at least 18 inches away from wood surfaces. They will not be used in the presence of dust, vapors, flammable or combustible liquids, paper, or similar materials. Torches shall never be left unattended while they are burning.
- The company has a specific policy regarding cigarette/cigar/pipe smoking in the workplace. Smoking and non-smoking areas will be clearly delineated with conspicuous signs. Rigid enforcement will be maintained always. The plan administrator will enforce the observance of permissible and prohibited smoking areas for employees and outside visitors to the workplace. Fire-safe, metal containers will be provided where smoking is permitted. No-smoking areas will be checked periodically for evidence of discarded smoking materials.

Static Electricity

- The company recognizes that it is impossible to prevent the generation of static electricity in every situation, but the company realizes that the hazard of static sparks can be avoided by preventing the buildup of static charges. One or more of the following preventive methods will be used: grounding, bonding, maintaining a specific humidity level (usually 60 -70 percent), and ionizing the atmosphere.
- Where a static accumulating piece of equipment is unnecessarily located in a hazardous area, the equipment will be relocated to a safe location rather than attempt to prevent static accumulation.
- Table 2 lists common sources of ignition that cause fires in the workplace, gives examples in each case and suggests preventive measures.

HOUSEKEEPING PREVENTATIVE TECHNIQUES

The following are housekeeping techniques and procedures to prevent occurrences of fire. Keep storage and working areas free of trash.

- Place oily rags in covered containers and dispose of daily.

- Do not use gasoline or other flammable solvent or finish to clean floors.
- Use noncombustible oil-absorptive materials for sweeping floors consisting of sawdust or some other combustible material treated with oil.
- Dispose of materials in noncombustible containers that are emptied daily. Remove accumulation of combustible dust.
- Don't refuel gasoline-powered equipment in a confined space, especially in the presence of equipment such as furnaces or water heaters.
- Don't refuel gasoline-powered equipment while it is hot. Follow proper storage and handling procedures.
- Ensure combustible materials are present only in areas in quantities required for the work operation. Clean up any spill of flammable liquids immediately.
- Ensure that if a worker's clothing becomes contaminated with flammable liquids, these individuals change their clothing before continuing to work.
- Post "No Smoking" caution signs near the storage areas.
- Report any hazardous condition such as old wiring, worn insulation, and broken electrical equipment to the supervisor.
- Keep motors clean and in good working order. Don't overload electrical outlets.
- Ensure all equipment is turned off at the end of the workday.
- Maintain the right type of fire extinguisher available for use.
- Use the safest cleaning solvents (nonflammable and nontoxic) when cleaning electrical equipment. Such solvents include inhibited methyl chloroform or a blend of Stoddard solvent and perchloroethylene.
- Ensure that all passageways and fire doors are unobstructed. Stairwell doors shall never be propped open, and materials shall not be stored in stairwells.
- Periodically remove over spray residue from walls, floors, and ceilings of spray booths and ventilation ducts.

- Remove contaminated spray booth filters from the building as soon as replaced or keep immersed in water until dispose of.
- Don't allow materials to block automatic sprinkler systems, or to be piled around fire extinguisher locations. To obtain the proper distribution of water, a minimum of 18 inches of clear space must be maintained below sprinkler deflectors. If there are no sprinklers, a 3-foot clearance between piled material and the ceiling must be maintained to permit the use of hose streams. These distances must be doubled when the stock is piled higher than 15 feet.
- Check daily for any discarded trash or boxes stored on site and remove properly. Restack immediately any material which falls into an aisle or clear space.
- Use weed killers that are not toxic and do not pose a fire hazard.

EXHIBIT A- FIRE PREVENTION CHECKLIST

This checklist should be reviewed regularly and kept up to date.

ELECTRICAL EQUIPMENT

- ___ No makeshift wiring
- ___ Fuse and control boxes clean and closed
- ___ Extension cords serviceable
- ___ Circuits properly fused or otherwise protected
- ___ Motors and tools free of dirt and grease
- ___ Equipment approved for use in hazardous areas (if required)
- ___ Lights clear of combustible materials
- ___ Ground connections clean and tight and have electrical continuity
- ___ Safest cleaning solvents used

FRICTION

- ___ Machinery properly lubricated
- ___ Machinery properly adjusted and/or aligned

SPECIAL FIRE-HAZARD MATERIALS

___ Storage of special flammables isolated

___ Nonmetal stock free of tramp metal

WELDING AND CUTTING

___ Area surveyed for fire safety

___ Combustibles removed or covered

___ Permit issued

OPEN FLAMES

___ Kept away from spray rooms and booths

___ Portable torches clear of flammable surfaces

___ No gas leaks

PORTABLE HEATERS

___ Set up with ample horizontal and overhead clearances

___ Safely mounted on noncombustible surface

___ Secured against tipping or upset

___ Use of steel drums prohibited

___ Combustibles removed or covered

___ Not used as rubbish burners

HOT SURFACES

___ Hot pipes clear of combustible materials

___ Soldering irons kept off combustible surfaces

___ Ample clearance around boilers and furnaces

___ Ashes in metal containers

SMOKING AND MATCHES

___ "No smoking" and "smoking" areas clearly marked

___ No discarded smoking materials in prohibited areas

___ Butt containers available and serviceable

SPONTANEOUS IGNITION

___ Flammable waste material in closed, metal containers

___ Stacked material cool dry and well ventilated

___ Flammable waste material containers emptied frequently

___ Trash receptacles emptied daily

STATIC ELECTRICITY

___ Flammable liquid dispensing vessels grounded and bonded

___ Proper humidity maintained

___ Moving machinery grounded

HOUSEKEEPING

___ No accumulations of rubbish

___ Premises free of unnecessary combustible materials

___ Safe storage of flammables

___ No leaks or dripping of flammables and floor free of spills

___ Passageways clear of obstacles

___ Fire doors unblocked and operating freely with fusible links intact

___ Automatic sprinklers unobstructed

FIRE PROTECTION

___ Proper type of fire extinguisher

___ Extinguishing system in working order

___ Fire extinguisher in proper location

___ Service date current

___ Access to fire extinguishers unobstructed

___ Personnel trained in use of equipment

___ Access to fire extinguishers clearly marked

____ Personnel exits unobstructed and maintained

____ Fire protection equipment turned on

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|-------|-----------|------------|-------------------|--|
| Description Safety Monitor | | | | | | | | All costs on this sheet are a guide line and may already reflect on original bid. This form is to make sure that all costs are |
| Safety Monitor Labor 1926.502(h) | \$95.00 | 1 | 20 | 25 | \$95.00 | \$1,900.00 | \$47,500.00 | |
| "Safety monitoring systems." Safety monitoring systems [See 1926.501(b)(10) and 1926.502(k)] and their use shall comply with the following provisions: | | 0 | 0 | 0 | 0 | 0 | \$0.00 | Accounted for |
| 1926.502(h)(1) | | | | | 0 | 0 | \$0.00 | |
| The employer shall designate a competent person to monitor the safety of other employees and the employer shall ensure that the safety monitor complies with the following requirements: | | | | | 0 | 0 | \$0.00 | |
| 1926.502(h)(1)(i) | | | | | 0 | 0 | \$0.00 | |
| The safety monitor shall be competent to recognize fall hazards: | | | | | 0 | 0 | \$0.00 | |
| 1926.502(h)(1)(ii) | | | | | 0 | 0 | \$0.00 | |
| The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner: | | | | | 0 | 0 | \$0.00 | |
| 1926.502(h)(1)(iii) | | | | | 0 | 0 | \$0.00 | |
| The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee being monitored: | | | | | 0 | 0 | \$0.00 | |
| 1926.502(h)(1)(iv) | | | | | 0 | 0 | \$0.00 | |
| The safety monitor shall be close enough to communicate orally with the employee; and | | | | | 0 | 0 | \$0.00 | |
| 1926.502(h)(1)(v) | | | | | 0 | 0 | \$0.00 | |
| The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function | | | | | 0 | 0 | \$0.00 | |
| 1926.502(h)(4) | | | | | 0 | 0 | \$0.00 | |
| Each employee working in a controlled access zone shall be directed to comply promptly with fall hazard warnings from safety monitors | | | | | 0 | 0 | \$0.00 | |
| Description Record Keeping | | | | | 0 | 0 | \$0.00 | |
| Clerk of the Werks - Safety Documentation | \$0.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| (Article I, Subarticle III, Section 302) | | | | | 0 | 0 | \$0.00 | |
| OSHA Form 300: Are occupational deaths, injuries and illnesses recorded and reported as required? | | | | | 0 | 0 | \$0.00 | |
| (Article I, Subarticle III, Section 305) | | | | | 0 | 0 | \$0.00 | |
| OSHA Form 300A: Is the annual summary portion of the OSHA 300 completed by February 1? Is the summary posted from February 1 through April 30? | | | | | 0 | 0 | \$0.00 | |
| (Article I, Subarticle III, Section 304) | | | | | 0 | 0 | \$0.00 | |
| OSHA Form 301 or other records with same information as OSHA Form 301: Is a supplementary individual record of each occupational injury and illness completed within 7 calendar days after a case occurs? (Article I, Subarticle III, Section 304) | | | | | 0 | 0 | \$0.00 | |
| (Article I, Subarticle V, Section 502A) | | | | | 0 | 0 | \$0.00 | |
| Is the S.C. Department of Labor, Licensing and Regulation (LLR) poster SCLD-5-SH "Safety and Health Protection on the Job" posted in a conspicuous place? | | | | | 0 | 0 | \$0.00 | |
| (Article I, Subarticle III, Section 308) | | | | | 0 | 0 | \$0.00 | |
| Is SC OSHA notified within eight hours of any employment fatality or accident which results in in-patient hospitalization of three or more employees? | | | | | 0 | 0 | \$0.00 | |
| Description Training | | | | | 0 | 0 | \$0.00 | |
| Safety Training Program Project Start | \$0.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| 1926.503(a)(1) | | | | | 0 | 0 | \$0.00 | |
| The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards. | | | | | 0 | 0 | \$0.00 | |
| 1926.503(b)(1) | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|-------|-----------|-----------|-------------------|-------|
| The employer shall verify compliance with paragraph (a) of this section by preparing a written certification record. The written certification record shall contain the name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer. If the employer relies on training conducted by another employer or completed prior to the effective date of this section, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training | | | | | 0 | 0 | \$0.00 | |
| Description Sanitation | | | | | 0 | 0 | \$0.00 | |
| Sanitation - Portable Toilet / Hand Wash Station | \$200.00 | 3 | 0 | 25 | 600 | 0 | \$15,000.00 | |
| OSHA 1926.51 | | | | | 0 | 0 | \$0.00 | |
| Potable (drinking) water and adequate toilet facilities must be provided to all employees while on jobsite 2 each x 90 days | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Description Hazcom/ GHS Occupational Health | | | | | 0 | 0 | \$0.00 | |
| 1926.62(a) Hazardous Material Remediation (Lead) | \$0.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| Lead: Are employers who engage in construction work occupationally exposed to lead? | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Typical/common operations which involve potential employee exposure to Lead: | | | | | 0 | 0 | \$0.00 | |
| Application of coating materials (paints, primers) to surfaces, particularly spray application | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Removal of lead containing coatings (surface preparation operations which involve, abrasive blasting, scraping, grinding, heat gunning etc.) | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Lead burning Welding, brazing, torch cutting, torch burning, and soldering on or with materials containing lead, Rivet busting, Demolition of structures where lead containing paint, mortars, or other materials containing lead | | | | | 0 | 0 | \$0.00 | |
| (Note) To determine whether or not there is a lead exposure hazard, the following resources should be consulted: (1) SDS sheets of materials used (paint, welding materials, etc.), (2) Visual observations of presence of suspect materials (paints used for corrosion resistance, red, yellow, or orange paints), (3) Environmental survey reports. Bulk samples of suspect materials should be tested to determine if material contains significant amounts of lead. | | | | | 0 | 0 | \$0.00 | |
| 1926.62(c)(1) | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Permissible exposure limit (PEL): Are employers exposed to lead at concentrations greater than 50ug/m3 averaged over an 8-hour period? | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| 1926.62(d) Hazardous Material Remediation (Investigation) | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Exposure assessment: If the presence of lead is indicated or construction work involving work listed above is being performed: Has a determination of employee exposure to lead been performed by utilizing personal air sampling on a representative number of exposed employees to specific lead related tasks over an eight hour time weighted average? | | | | | 0 | 0 | \$0.00 | |
| 1926.62(d) | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| If no, the employer must implement interim protective measures as follows: Provide respiratory protection specified for operation, Provide protective clothing (coveralls, head covers), Provide hand washing facilities, Provide biological monitoring (Blood sampling and lead and ZPP analysis), Provide training program to inform employees of hazards of exposure to lead and and necessary measures employees must follow to protect themselves. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Hazardous Material Remediation (Employer to Supply) | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|--|------------|-------|-------|-------|-----------|-----------|-------------------|-------|
| Employer shall: Provide a medical surveillance program for affected employees. 1926.62(j) Provide training program. 1926.62(l) Is exposure level greater than 50 ug/m3 (PEL)? Then in addition, the employer shall: Develop a written compliance program. 1926.62(e) Provide appropriate respiratory protection and appropriate practices governing the use of respirators in accordance with 1926.62(f). Provide and require the use of hygiene facilities (change rooms, showers and hand washing facilities). 1926.62(i) Ensure that employees do not eat, drink, smoke, or apply cosmetics in areas where employees are exposed to lead above the PEL. 1926.62(i)(4) Maintain all surfaces as free as practicable of lead. 1926.62(h)(1) Ensure that vacuums used to collect lead contaminated dust are equipped with HEPA filters. 1926.62(h)(4) Ensure that compressed air is not used to remove lead from surfaces unless used in conjunction with ventilation systems designed to capture/contain dust generated from process. 1926.62(h)(5) | | | | | | | | |
| | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Description Respiration | | | | | 0 | 0 | \$0.00 | |
| 1910.134(a) | \$45.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| Permissible practice. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(a)(1) | | | | | 0 | 0 | \$0.00 | |
| In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this section. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(a)(2) | | | | | 0 | 0 | \$0.00 | |
| A respirator shall be provided to each employee when such equipment is necessary to protect the health of such employee. The employer shall provide the respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program, which shall include the requirements outlined in paragraph (c) of this section. The program shall cover each employee required by this section to use a respirator. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c) | | | | | 0 | 0 | \$0.00 | |
| Respiratory protection program. This paragraph requires the employer to develop and implement a written respiratory protection program with required worksite-specific procedures and elements for required respirator use. The program must be administered by a suitably trained program administrator. In addition, certain program elements may be required for voluntary use to prevent potential hazards associated with the use of the respirator. The Small Entity Compliance Guide contains criteria for the selection of a program administrator and a sample program that meets the requirements of this paragraph. Copies of the Small Entity Compliance Guide will be available on or about April 8, 1998 from the Occupational Safety and Health Administration's Office of Publications, Room N 3101, 200 Constitution Avenue, NW, Washington, DC, 20210 (202-219-4667). | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1) | | | | | 0 | 0 | \$0.00 | |
| In any workplace where respirators are necessary to protect the health of the employee or whenever respirators are required by the employer, the employer shall establish and implement a written respiratory protection program with worksite-specific procedures. The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use. The employer shall include in the program the following provisions of this section, as applicable: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(i) | | | | | 0 | 0 | \$0.00 | |
| Procedures for selecting respirators for use in the workplace: | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|-------|-----------|-----------|-------------------|-------|
| 1910.134(c)(1)(ii) | | | | | 0 | 0 | \$0.00 | |
| Medical evaluations of employees required to use respirators: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(iii) | | | | | 0 | 0 | \$0.00 | |
| Fit testing procedures for tight-fitting respirators: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(iv) | | | | | 0 | 0 | \$0.00 | |
| Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(v) | | | | | 0 | 0 | \$0.00 | |
| Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(vi) | | | | | 0 | 0 | \$0.00 | |
| Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(vii) | | | | | 0 | 0 | \$0.00 | |
| Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(viii) | | | | | 0 | 0 | \$0.00 | |
| Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance; and | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(1)(ix) | | | | | 0 | 0 | \$0.00 | |
| Procedures for regularly evaluating the effectiveness of the program. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(2) | | | | | 0 | 0 | \$0.00 | |
| Where respirator use is not required: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(2)(i) | | | | | 0 | 0 | \$0.00 | |
| An employer may provide respirators at the request of employees or permit employees to use their own respirators, if the employer determines that such respirator use will not in itself create a hazard. If the employer determines that any voluntary respirator use is permissible, the employer shall provide the respirator users with the information contained in Appendix D to this section ("Information for Employees Using Respirators When Not Required Under the Standard"); and | \$50.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| 1910.134(c)(2)(ii) | | | | | 0 | 0 | \$0.00 | |
| In addition, the employer must establish and implement those elements of a written respiratory protection program necessary to ensure that any employee using a respirator voluntarily is medically able to use that respirator, and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the user. Exception: Employers are not required to include in a written respiratory protection program those employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks). | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(3) | | | | | 0 | 0 | \$0.00 | |
| The employer shall designate a program administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(c)(4) | | | | | 0 | 0 | \$0.00 | |
| The employer shall provide respirators, training, and medical evaluations at no cost to the employee. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d) | | | | | 0 | 0 | \$0.00 | |
| <i>Selection of respirators.</i> This paragraph requires the employer to evaluate respiratory hazard(s) in the workplace, identify relevant workplace and user factors, and base respirator selection on these factors. The paragraph also specifies appropriately protective respirators for use in IDLH atmospheres, and limits the selection and use of air-purifying respirators. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(1) | | | | | 0 | 0 | \$0.00 | |
| <i>General requirements.</i> | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(1)(i) | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|--|------------|-------|-------|-------|-----------|-----------|-------------------|------------|
| The employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(1)(ii) | | | | | 0 | 0 | \$0.00 | |
| The employer shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(1)(iii) | | | | | 0 | 0 | \$0.00 | |
| The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(1)(iv) | | | | | 0 | 0 | \$0.00 | |
| The employer shall select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(2) | | | | | 0 | 0 | \$0.00 | |
| <i>Respirators for IDLH atmospheres.</i> | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(2)(i) | | | | | 0 | 0 | \$0.00 | |
| The employer shall provide the following respirators for employee use in IDLH atmospheres: | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(2)(i)(A) | | | | | 0 | 0 | \$0.00 | |
| A full facepiece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(2)(i)(B) | | | | | 0 | 0 | \$0.00 | |
| A combination full facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(2)(ii) | | | | | 0 | 0 | \$0.00 | |
| Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(2)(iii) | | | | | 0 | 0 | \$0.00 | |
| All oxygen-deficient atmospheres shall be considered IDLH. Exception: If the employer demonstrates that, under all foreseeable conditions, the oxygen concentration can be maintained within the ranges specified in Table II of this section (i.e., for the altitudes set out in the table), then any atmosphere-supplying respirator may be used. | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(3) | | | | | 0 | 0 | \$0.00 | |
| <i>Respirators for atmospheres that are not IDLH.</i> | | | | | 0 | 0 | \$0.00 | |
| 1910.134(d)(3)(i) | | | | | 0 | 0 | \$0.00 | |
| The employer shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations. | | | | | 0 | 0 | \$0.00 | |
| Description PPE | | | | | 0 | 0 | \$0.00 | |
| N-95 Disposable Masks | \$42.50 | 12 | 0 | 12 | 510 | 0 | \$6,120.00 | 20 workers |
| OSHA 1926.28(a) | | | | | 0 | 0 | \$0.00 | |
| Employees are required to wear personal protective equipment when exposed to hazardous conditions | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Gloves, Leather / Cut Proof | \$7.20 | 50 | | 25 | \$360.00 | 0 | \$9,000.00 | |
| OSHA 1926.28(a) | | | | | 0 | 0 | \$0.00 | |
| Employees are required to wear personal protective equipment when exposed to hazardous conditions | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Gloves, Nitrile (per 100) | \$45.75 | 2 | | 25 | \$91.50 | 0 | \$2,287.50 | |
| OSHA 1926.28(a) | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|--|------------|-------|-------|-------|-----------|-----------|-------------------|-------|
| Employees are required to wear personal protective equipment when exposed to hazardous conditions | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Goggles / Face shield | \$12.50 | 25 | | 65 | 312.5 | 0 | \$20,312.50 | |
| Calculation of Materials and Labor to Comply to this OSHA Standard | | | | | 0 | 0 | \$0.00 | |
| 3 cases x 144/case | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Ear Plugs, Disposable | \$60.00 | 2 | | 52 | 120 | 0 | \$6,240.00 | |
| OSHA 1926.52, 1926.101 | | | | | 0 | 0 | \$0.00 | |
| Ear protection devices must be provided and used wherever it is not feasible to reduce noise levels or where a deviation to exposure levels specified in Table D-2, permissible noise exposure exists. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Head Protection | \$16.00 | 25 | | 1 | 400 | 0 | \$400.00 | |
| OSHA 1926.100 | | | | | 0 | 0 | \$0.00 | |
| Protective helmets (hard hats) must be worn at all times where there is a possible danger of head injury from impact, falling, or flying objects, or electrical shocks and burns. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Tyvek Suit | | | | | 0 | 0 | \$0.00 | |
| OSHA 1910.132(a) | \$19.95 | 0 | | | 0 | 0 | \$0.00 | |
| Application. Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact. | | | | | 0 | 0 | \$0.00 | |
| Description Fire | | | | | 0 | 0 | \$0.00 | |
| Portable Fire Extinguisher | \$35.00 | 5 | 0 | 1 | 175 | 0 | \$175.00 | |
| OSHA 1926.152(g)(11) | | | | | 0 | 0 | \$0.00 | |
| At least one portable fire extinguisher with a rating of not less than 2-B:C must be located within 75 feet of each pump, dispenser, underground fill pipe opening and lubrication or refueling service area | | | | | 0 | 0 | \$0.00 | |
| Description Signs Signals and Barricades | | | | | 0 | 0 | \$0.00 | |
| Job-Site Signage | \$30.00 | 10 | 0 | 1 | 300 | 0 | \$300.00 | |
| OSHA 1926.200(a), OSHA 1926.200(g)(2) | | | | | 0 | 0 | \$0.00 | |
| Accident prevention signs and tags must be visible at all times when work is being performed and/or removed or covered promptly when the hazard no longer exists. Traffic control signs or devised used for workers' protection must conform with Part IV of the Manual of Uniform Traffic Control Devices (MUTCD) 1988 edition revision 3 or Part VI of the MUTCD Millennium edition | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Signaling - General Laborer - Per Hour | \$30.00 | 1 | 40 | 25 | 30 | 1200 | \$30,000.00 | |
| OSHA 1926.2201(a) | | | | | 0 | 0 | \$0.00 | |
| The use of flaggers and signaling by flaggers, including warning garments worn by flaggers, must be in conformance with Part VI of the Part IV of the Manual of Uniform Traffic Control Devices (MUTCD) 1988 edition, revision 3 or Millennium edition. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Barricades | | | | | 0 | 0 | \$0.00 | |
| OSHA 1926.202 | | | | | 0 | 0 | \$0.00 | |
| Barricades used for protection of workers must be in conformance with Part VI of the Part IV of the Manual of Uniform Traffic Control Devices (MUTCD) 1988 edition, revision 3 or Millennium edition | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| On-Site Safety Personnel - Scaffolding Shift / Training | | 0 | 0 | 0 | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|-------|-----------|-----------|-------------------|-----------------|
| OSHA 1926.451(f)(3). OSHA 1926.454(a) | | | | | 0 | 0 | \$0.00 | |
| Inspection of all scaffolding for visual defects by a competent person must be performed prior to each shift and after each occurrence which could affect a scaffold's structural integrity. All employees who perform work while on a scaffold must be trained by a qualified person to recognize the hazard associated with the type of scaffold being used and in the understanding of procedures to control or minimize those hazards. | | | | | 0 | 0 | \$0.00 | |
| Description Electrical | | | | | 0 | 0 | \$0.00 | |
| 1926.416(a) | \$75.00 | 2 | 40 | 10 | 150 | 6000 | \$60,000.00 | Bid Item |
| Protection of employees - | | | | | 0 | 0 | \$0.00 | |
| 1926.416(a)(1) | | | | | 0 | 0 | \$0.00 | |
| No employer shall permit an employee to work in such proximity to any part of an electric power circuit that the employee could contact the electric power circuit in the course of work, unless the employee is protected against electric shock by deenergizing the circuit and grounding it or by guarding it effectively by insulation or other means. | | | | | 0 | 0 | \$0.00 | |
| 1926.416(a)(2) | | | | | 0 | 0 | \$0.00 | |
| In work areas where the exact location of underground electric powerlines is unknown, employees using jack-hammers, bars, or other hand tools which may contact a line shall be provided with insulated protective gloves. | | | | | 0 | 0 | \$0.00 | |
| 1926.416(a)(3) | | | | | 0 | 0 | \$0.00 | |
| Before work is begun the employer shall ascertain by inquiry or direct observation, or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool, or machine into physical or electrical contact with the electric power circuit. The employer shall post and maintain proper warning signs where such a circuit exists. The employer shall advise employees of the location of such lines, the hazards involved, and the protective measures to be taken. | | | | | 0 | 0 | \$0.00 | |
| 1926.416(b) | | | | | 0 | 0 | \$0.00 | |
| 1926.416(b) | | | | | 0 | 0 | \$0.00 | |
| Passageways and open spaces - | | | | | 0 | 0 | \$0.00 | |
| 1926.416(b)(1) | | | | | 0 | 0 | \$0.00 | |
| Barriers or other means of guarding shall be provided to ensure that workspace for electrical equipment will not be used as a passageway during periods when energized parts of electrical equipment are exposed. | | 0 | | | 0 | 0 | \$0.00 | |
| 19+C15:C2826.416(b)(2) | | | | | 0 | 0 | \$0.00 | |
| Working spaces, walkways, and similar locations shall be kept clear of cords so as not to create a hazard to employees. | | | | | 0 | 0 | \$0.00 | |
| Cords and cables. | | | | | 0 | 0 | \$0.00 | |
| 1926.416(e)(1) | | | | | 0 | 0 | \$0.00 | |
| Worn or frayed electric cords or cables shall not be used. | | | | | 0 | 0 | \$0.00 | |
| 1926.416(e)(2) | | | | | 0 | 0 | \$0.00 | |
| Extension cords shall not be fastened with staples, hung from nails, or suspended by wire. | | | | | 0 | 0 | \$0.00 | |
| 1926.417(a) | | | | | 0 | 0 | \$0.00 | |
| Controls. Controls that are to be deactivated during the course of work on energized or deenergized equipment or circuits shall be tagged. | \$100.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| 1926.417(b) | | | | | 0 | 0 | \$0.00 | |
| Equipment and circuits. Equipment or circuits that are deenergized shall be rendered inoperative and shall have tags attached at all points where such equipment or circuits can be energized. | | | | | 0 | 0 | \$0.00 | |
| 1926.417(c) | | | | | 0 | 0 | \$0.00 | |
| Tags. Tags shall be placed to identify plainly the equipment or circuits being worked on. | | | | | 0 | 0 | \$0.00 | |
| Description Demolition | | | | | 0 | 0 | \$0.00 | |
| Debris Chute Hopper - per week - 30" x 4' section | \$36.00 | 10 | 0 | 10 | \$360.00 | 0 | \$3,600.00 | |
| OSHA 1926.852(a) | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|-------|-----------|-----------|-------------------|------------------------|
| Any area where materials is dropped outside the exterior walls of the structure must be adequately protected | | | | | 0 | 0 | \$0.00 | |
| | | 0 | | | 0 | 0 | \$0.00 | |
| Debris Chute - per week - 30" x 4' section | \$15.50 | 0 | | | 0 | 0 | \$0.00 | |
| 16+C15:C28 | | 0 | | | 0 | 0 | \$0.00 | |
| Any area where materials is dropped outside the exterior walls of the structure must be adequately protected. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Debris Chute Mounting Hardware - Per Week | \$21.25 | 2 | | 10 | \$42.50 | 0 | \$425.00 | |
| OSHA 1926.852(a) | | | | | 0 | 0 | \$0.00 | |
| Any area where materials is dropped outside the exterior walls of the structure must be adequately protected. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Description Scaffolds Bid Item | | | | | 0 | 0 | \$0.00 | Bid Item Needed |
| Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports as follows: | \$50.00 | 10 | 1 | 15 | 500 | 500 | \$7,500.00 | |
| 1926.451(b)(1)(i) | | | | | 0 | 0 | \$0.00 | |
| Each platform unit (e.g., scaffold plank, fabricated plank, fabricated deck, or fabricated platform) shall be installed so that the space between adjacent units and the space between the platform and the uprights is no more than 1 inch (2.5 cm) wide, except where the employer can demonstrate that a wider space is necessary (for example, to fit around uprights when side brackets are used to extend the width of the platform). | | | | | 0 | 0 | \$0.00 | |
| Labor to set up and take down scaffold - per section | | | | | 0 | 0 | \$0.00 | |
| Scaffold - Delivery | | | | | 0 | 0 | \$0.00 | |
| Scaffold - Demobilization | | | | | 0 | 0 | \$0.00 | |
| Scaffolding (Bid Item) - Bakers Scaffold | | | | | 0 | 0 | \$0.00 | |
| Description Stairways and Ladders | | | | | 0 | 0 | \$0.00 | |
| General Requirements - Ladder Access Points | \$59.05 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| OSHA 1926. 1051(a) | | | | | 0 | 0 | \$0.00 | |
| A ladder or stairway must be provided at all personnel points of access where there is a break in elevation of 19" or more. Ladders will be fabricated and installed at all varying roof elevations. | | | | | 0 | 0 | \$0.00 | |
| Description Storage | | | | | 0 | 0 | \$0.00 | |
| General Requirements for Storage General Laborer | \$34.34 | 1 | 40 | 10 | 34.34 | 1373.6 | \$13,736.00 | |
| 1926.250(a)(1) | | | | | 0 | 0 | \$0.00 | |
| All materials which are stored in tiers either stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| 1926.250(a)(2) | | | | | 0 | 0 | \$0.00 | |
| Maximum safe load limits of floors within buildings and structures, in pounds per square foot, shall be conspicuously posted in all storage areas, except for floor or slab on grade. Maximum safe loads shall not be exceeded. | | | | | 0 | 0 | \$0.00 | |
| Description Fall Protection | | | | | 0 | 0 | \$0.00 | |
| Fall Protection - Roof Labor Daily rent rate X Units X Days X Weeks | \$8.00 | 10 | 1 | 10 | \$80.00 | 80 | \$800.00 | |
| 1926.501(b)(2)(ii) | | | | | 0 | 0 | \$0.00 | |
| Each employee on a walking/working surface 6 feet (1.8 m) or more above a lower level where leading edges are under construction, but who is not engaged in the leading edge work, shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system. If a guardrail system is chosen to provide the fall protection, and a controlled access zone has already been established for leading edge work, the control line may be used in lieu of a guardrail along the edge that parallels the leading edge. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| 1926.501(b)(2)(i) | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|--|------------|-------|-------|-------|-----------|-----------|-------------------|-------|
| Each employee who is constructing a leading edge 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems. Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements of paragraph (k) of 1926.502. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Walking Surfaces - General Laborer | | 0 | | | 0 | 0 | \$0.00 | |
| 1926.501(b)(4)(i) | | | | | 0 | 0 | \$0.00 | |
| Each employee on walking/working surfaces shall be protected from falling through holes (including skylights) more than 6 feet (1.8 m) above lower levels, by personal fall arrest systems, covers, or guardrail systems erected around such holes. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| 1926.501(b)10 | | | | | 0 | 0 | \$0.00 | |
| Roofing work on Low-slope roofs." Except as otherwise provided in paragraph (b) of this section, each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail system, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system. Or, on roofs 50-feet (15.25 m) or less in width (see Appendix A to subpart M of this part), the use of a safety monitoring system alone [i.e. without the warning line system] is permitted. | | | | | 0 | 0 | \$0.00 | |
| 1926.501(b)(11) | | | | | 0 | 0 | \$0.00 | |
| Steep roofs. Each employee on a steep roof with unprotected sides and edges 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems with toe boards, safety net systems, or personal fall arrest systems. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| 1926.501(b)(15) | | | | | 0 | 0 | \$0.00 | |
| Walking/working surfaces not otherwise addressed. Except as provided in 1926.500(a)(2) or in 1926.501 (b)(1) through (b)(14), each employee on a walking/working surface 6 feet (1.8 m) or more above lower levels shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system. | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Barricade Work Area from falling objects | | | | | 0 | 0 | \$0.00 | |
| 1926.501(c)(3) | | | | | 0 | 0 | \$0.00 | |
| Barricade the area to which objects could fall, prohibit employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced. | \$10.00 | 0 | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Personal Fall Protection | | | | | 0 | 0 | \$0.00 | |
| 1926.502(d) | \$100.00 | 0 | 0 | | 0 | 0 | \$0.00 | |
| Personal fall arrest systems. Personal fall arrest systems and their use shall comply with the provisions set forth below. Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system. Note: The use of a body belt in a positioning device system is acceptable and is regulated under paragraph (e) of this section. | | | | | 0 | 0 | \$0.00 | |
| Description Motor Vehicles | | | | | 0 | 0 | \$0.00 | |
| 1926.601(a) | | | | | 0 | 0 | \$0.00 | |
| Coverage. Motor vehicles as covered by this part are those vehicles that operate within an off-highway jobsite, not open to public traffic. The requirements of this section do not apply to equipment for which rules are prescribed in 1926.602. | \$0.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |
| 1926.601(b) | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|-------|-----------|-----------|-------------------|-------|
| General requirements. | | | | | 0 | 0 | \$0.00 | |
| 1926.601(b)(1) | | | | | 0 | 0 | \$0.00 | |
| All vehicles shall have a service brake system, an emergency brake system, and a parking brake system. These systems may use common components, and shall be maintained in operable condition. | | | | | 0 | 0 | \$0.00 | |
| 1926.601(b)(14) | | | | | 0 | 0 | \$0.00 | |
| All vehicles in use shall be checked at the beginning of each shift to assure that the following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use: service brakes, including trailer brake connections; parking system (hand brake); emergency stopping system (brakes); tires; horn; steering mechanism; coupling devices; seat belts; operating controls; and safety devices. All defects shall be corrected before the vehicle is placed in service. These requirements also apply to equipment such as lights, reflectors, windshield wipers, defrosters, fire extinguishers, etc., where such equipment is necessary. | | | | | 0 | 0 | \$0.00 | |
| The overhead covering on this canopy structure shall be of not less than 1/8-inch steel plate or 1/4-inch woven wire mesh with openings no greater than 1 inch, or equivalent. | | | | | 0 | 0 | \$0.00 | |
| 1926.604(a)(2)(ii) | | | | | 0 | 0 | \$0.00 | |
| The opening in the rear of the canopy structure shall be covered with not less than 1/4-inch woven wire mesh with openings no greater than 1 inch. | | | | | 0 | 0 | \$0.00 | |
| 5,470. Backhoe loader - Delivery | | | | | 0 | 0 | \$0.00 | |
| 5,471. Backhoe loader -Demobilization | | | | | 0 | 0 | \$0.00 | |
| 1926.600(a)(3)(i) | | | | | 0 | 0 | \$0.00 | |
| Heavy machinery, equipment, or parts thereof, which are suspended or held aloft by use of slings, hoists, or jacks shall be substantially blocked or cribbed to prevent falling or shifting before employees are permitted to work under or between them. Bulldozer and scraper blades, end-loader buckets, dump bodies, and similar equipment, shall be either fully lowered or blocked when being repaired or when not in use. All controls shall be in a neutral position, with the motors stopped and brakes set, unless work being performed requires otherwise. | | | | | 0 | 0 | \$0.00 | |
| 1926.600(a)(3)(ii) | | | | | 0 | 0 | \$0.00 | |
| Whenever the equipment is parked, the parking brake shall be set. Equipment parked on inclines shall have the wheels chocked and the parking brake set. | | | | | 0 | 0 | \$0.00 | |
| 1926.600(a)(4) | | | | | 0 | 0 | \$0.00 | |
| The use, care and charging of all batteries shall conform to the requirements of Subpart K of this part. | | | | | 0 | 0 | \$0.00 | |
| 1926.600(a)(5) | | | | | 0 | 0 | \$0.00 | |
| All cab glass shall be safety glass, or equivalent, that introduces no visible distortion affecting the safe operation of any machine covered by this subpart. | | | | | 0 | 0 | \$0.00 | |
| 5,476. Front end wheel loader -Delivery | | | | | 0 | 0 | \$0.00 | |
| 5,477. Front end wheel loader -Demobilization | | | | | 0 | 0 | \$0.00 | |
| 5,478. Dump truck and operator - 10 ton | | | | | 0 | 0 | \$0.00 | |
| 5,480. Skid steer loader - Delivery 5,481. Skid Steer Jack Hammer 5,482. Scissor lift - 20' platform height, Boom Lift Exclude delivery charge subjct to location | \$250.00 | 0 | | 0 | \$0.00 | 0 | \$0.00 | |
| 5,483. Scissor lift - 20' platform height Exclude delivery charge subject to location | \$250.00 | 0 | | 25 | \$0.00 | 0 | \$0.00 | |
| 5,484. Scissor lift - 20' platform height Exclude delivery charge subject to location | | | | | 0 | 0 | \$0.00 | |
| 5,485. Telehandler/forklift and operator Exclude delivery charge subject to location | \$450.00 | 1 | | 25 | \$450.00 | 0 | \$11,250.00 | |
| 5,486. Telehandler/forklift - Delivery Exclude delivery charge subject to location | | | | | 0 | 0 | \$0.00 | |
| 5,487. Telehandler/forklift -Demobilization Exclude delivery charge subject to location | | | | | 0 | 0 | \$0.00 | |
| Description Toxic Hazardous Material | | | | | 0 | 0 | \$0.00 | |
| Hazardous Material Remediation | \$0.00 | 0 | 0 | 0 | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|-------|-----------|-----------|-------------------|-----------------|
| 1926.1101 | | | | | 0 | 0 | \$0.00 | |
| Asbestos: Has a determination been made as to whether or not building contains Asbestos Containing Materials (ACM = Greater than 1% Asbestos) or Presumed Asbestos Containing Materials (PACM)? Was the building/structure constructed prior to 1980? Does it contain materials such as thermal system insulation (TSI), surfacing materials, floor tile, roofing materials, gaskets, and/or drywall/plaster? Is the material ACM? [Has a survey been performed to determine if materials in question are ACM?] | | | | | 0 | 0 | \$0.00 | |
| | | | | | 0 | 0 | \$0.00 | |
| Once the class of ACM work is determined, a complete copy of 1926.1101 should be | | | | | 0 | 0 | \$0.00 | |
| obtained and consulted to determine the specific requirements related to the specific class | | | | | 0 | 0 | \$0.00 | |
| of ACM work. Below is a list of general requirements applicable to all classes of ACM | | | | | 0 | 0 | \$0.00 | |
| work: | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(e) | | | | | 0 | 0 | \$0.00 | |
| Has a regulated area been established? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(f) | | | | | 0 | 0 | \$0.00 | |
| Has an exposure assessment/personal air sampling been performed to determine degree of employee exposure? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(e)(6) and (o) | | | | | 0 | 0 | \$0.00 | |
| Is a "competent person" who has an appropriate level of training to supervise the class of ACM work being performed been designated? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(h) | | | | | 0 | 0 | \$0.00 | |
| Have appropriate respirators and practices been implemented? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(i) | | | | | 0 | 0 | \$0.00 | |
| Has protective clothing (coveralls, head covers) been provided for employees to wear? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(j) | | | | | 0 | 0 | \$0.00 | |
| Are Hygiene facilities and practices appropriate to the class of ACM work and size of Job (Less than or Greater than 25 linear or 10 square feet)? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101 (d) and (k) | | | | | 0 | 0 | \$0.00 | |
| Are asbestos hazards communicated to affected employees and to other contractors by means of signs, labeling, and exchange of information concerning the work being done involving ACM? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(k) | | | | | 0 | 0 | \$0.00 | |
| Is training appropriate for class of ACM work provided? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(m) | | | | | 0 | 0 | \$0.00 | |
| Has a medical surveillance program been made available to affected employees? | | | | | 0 | 0 | \$0.00 | |
| 1926.1101(l) | | | | | 0 | 0 | \$0.00 | |
| Have appropriate housekeeping practices such as the use of HEPA filtered vacuuming equipment to collect ACM dust and placing ACM wastes/debris into impermeable, labeled, and sealed containers been established? | | | | | 0 | 0 | \$0.00 | |
| Description Crane Bid Item must have cost of Rigger wage Set up and Delivery | | | | | 0 | 0 | \$0.00 | |
| Crane Work Area | \$1,500.00 | 0 | 5 | 0 | 0 | 0 | \$0.00 | Bid Item Needed |
| 1926.1424(a)(2)(ii) | | | | | 0 | 0 | \$0.00 | |
| Erect and maintain control lines, warning lines, railings or similar barriers to mark the boundaries of the hazard areas. Exception: When the employer can demonstrate that it is neither feasible to erect such barriers on the ground nor on the equipment, the hazard areas must be clearly marked by a combination of warning signs (such as "Danger-- Swing/Crush Zone") and high visibility markings on the equipment that identify the hazard areas. In addition, the employer must train each employee to understand what these markings signify. | | | | | 0 | 0 | \$0.00 | |
| Crane and operator - 50 ton capacity - Delivery | | | | | 0 | 0 | \$0.00 | |
| Crane and operator - 50 ton capacity - Demobilization | | | | | 0 | 0 | \$0.00 | |
| Front end wheel loader and operator | | | | | 0 | 0 | \$0.00 | |
| Description | | | | | 0 | 0 | \$0.00 | |

| | Unit Price | Units | Hours | Weeks | Unit cost | Hour Cost | Job Duration cost | Notes |
|---|------------|-------|-------|---------|--------------|-----------|-------------------|-------|
| Temporary Fencing | \$22.58 | 20 | 0 | 20 | \$451.60 | 0 | \$0.00 | |
| Hepa Vac | \$77.00 | 0 | | 0 | 0 | 0 | \$0.00 | |
| Air Scrubber | \$82.00 | 0 | | 0 | 0 | 0 | \$0.00 | |
| Dehu | \$105.00 | 0 | | 0 | 0 | 0 | \$0.00 | |
| | | | | Total | \$3,478.10 | | \$166,236.00 | |
| Total refelects a weekly aveage charge for this jobsite | | | | G Total | \$166,236.00 | | | |
| | | | | | | | | |



Kevin C. Dandridge

1 Life Safety Consultation

4605 E Chandler Blvd
Suite 110-163
Phoenix Arizona 85048
602.799.4800 / Cell
kdandridge@1lifesafety

Back Ground and Qualifications.

Kevin Dandridge

Owner

January 20, 2020



Background and Qualifications

Summary of Qualifications

- Bachelor of Science degree in Business Management from the University of Phoenix in 2008
- Have completed 510 and 500 OSHA certifications. Able to certify students in 10 and 30-hour courses
- Disaster worker Trainer (1 of 20 Nationally)
- Haz-whopper 40 Certified
- NPF40E Certification. Train the Trainer for Arc Flash Low and High Voltage
- Authorized to Train Lock Out Tag Out
- Authorized to Train Class IV Asbestos, Lead, and Hazardous material
- Trainer in GHS for new SDS programs.
- Managed 150 direct employees as well as trade contractors and their employees
- Manage all workman's comp cases and Risk Management
- Authorized to Certify Boom Lift, MEWP, and Fork Lift, operators
- Authorized to work on Intel sites. Clean room Experience
- First Aid/ CPR/ AED trainer
- Expert witness in Safety related cases

List of Depositions:

November 5th, 2018

Holt Logistics VS Lexington Insurance

Merlin Law Group for the Plaintiff



February 14th, 2019

City of Rye VS Travelers Property Casualty Company

Merlin Law Group for the Plaintiff

Professional Experience

1 Life Safety Consultation

Owner

July 2018 to Present

DBSI, Unified Disaster Resources, and Design Drywall

National Safety Director

June 2013 to Present

- Develop and Oversee Safety programs for 3 Companies Nationally
- Design working Safety programs for Clients and site-specific locations
- Consultant to Public Adjusters Nationally
- Active Consultant to 2 law firms for safety and construction as well as an expert witness for their Clients.
- Maintain and oversee Fleet for all companies.
- Teach Arc flash classes
- Teach OSHA 10 and 30 Hour Courses
- Oversee budgets, trade vendor contracts, and regional guidelines
- Provide guidance on day-to-day tasks of employees including career advancement, training, and personal goals
- Oversee development of projects at multiple locations.
- Oversee bids for new Clientele
- Plan review to make sure safety is incorporated and budgeted.
- Promote trade partner relations
- Work with Insurance companies in Risk assessment

I have not authored any publications in the past 10 years.

I am being compensated at an hourly rate of \$195.00 for the work on this project not including any travel cost or per-diem.



I have 15 years in Safety review and consultation as well as 20 years in the building industry. I have done Safety review and consultation on commercial, residential, shipyard, chemical plants, industrial sites and ship dismantling yards.